

Anti-Amphiregulin/Areg Antibody Picoband™

Catalog Number: A01787-1

About Areg

Amphiregulin, also known as AREG, is a protein that in humans is encoded by the AREG gene. The protein encoded by this gene is a member of the epidermal growth factor (EGF) family. It is an autocrine growth factor as well as a mitogen for astrocytes, Schwann cells, fibroblasts. It is related to epidermal growth factor (EGF) and transforming growth factor alpha (TGF- α). This protein interacts with the Epidermal growth factor receptor (EGFR) to promote the growth of normal epithelial cells. It is mapped to 9q32. It has been shown to play a role in immunity, inflammation, tissue repair, and lung and mammary gland development. Homozygous knockout mice for this gene exhibit impaired immune system regulation in the skin and gene expression changes characteristic of chronic liver damage.

Overview

Product Name	Anti-Amphiregulin/Areg Antibody Picoband™
Reactive Species	Mouse, Rat
Description	Boster Bio Anti-Amphiregulin/Areg Antibody Picoband™ catalog # A01787-1. Tested in ELISA, IHC, WB applications. This antibody reacts with Mouse, Rat.
Application	ELISA, IHC, WB
Clonality	Polyclonal
Formulation	Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg NaN ₃ .
Storage Instructions	Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.
Host	Rabbit
Uniprot ID	P31955

Technical Details

Immunogen	E. coli-derived mouse Amphiregulin recombinant protein (Position:V100-K191).
Predicted Reactive Species	Human
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for IHC(P).
Cross Reactivity	No cross-reactivity with other proteins.
Isotype	Rabbit IgG
Form	Lyophilized

Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Purification	Immunogen affinity purified.
Suggested Dilutions	<p>Dilute the sample so that the expected range of concentrations fall within the detection range of this kit.</p> <p>If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples.</p> <p>Some PubMed article(s) citing the expression level of this target are as follows:</p> <p>Boster Bio's internal QC testing used:</p> <p>Western blot, 0.1-0.5ug/ml</p> <p>Immunohistochemistry (Paraffin-embedded Section), 0.5-1ug/ml</p> <p>ELISA (Cap), 1-5ug/ml</p>

Anti-Amphiregulin/Areg Antibody Picoband™ (A01787-1) Images

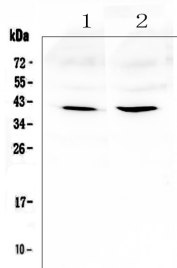


Figure 1. Western blot analysis of Amphiregulin using anti-Amphiregulin antibody (A01787-1). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions.

Lane 1: rat brain tissue lysates,
Lane 2: mouse brain tissue lysates.

After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-Amphiregulin antigen affinity purified polyclonal antibody (Catalog # A01787-1) at 0.5 ug/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for Amphiregulin at approximately 41KD. The expected band size for Amphiregulin is at 28KD.

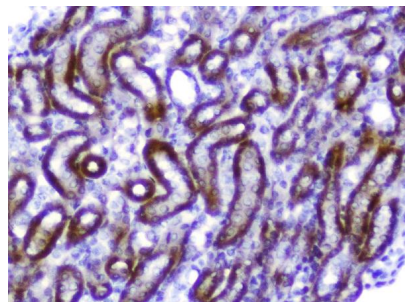


Figure 2. IHC analysis of Amphiregulin using anti-Amphiregulin antibody (A01787-1).

Amphiregulin was detected in paraffin-embedded section of mouse kidney tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-Amphiregulin Antibody (A01787-1) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB as the chromogen.

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